



RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 2814

PATENT APPLICATION  
Do. No. 9898-189

*NE*  
*# 7/0*  
*3-18-03*  
*J. Carter*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yoo-Sang HWANG and Su-Jin AHN

Serial No. 09/955,388

Examiner: Mai, Anh D

Confirmation No. 9987

Filed: September 17, 2001

Group Art Unit: 2814

For: SEMICONDUCTOR DEVICE HAVING CONTACT PLUG AND METHOD FOR  
MANUFACTURING THE SAME

BOX AF  
Assistant Commissioner for Patents  
Washington, D.C. 20231

*Please enter on 3/18/03*

RESPONSE TO FINAL ACTION

Responsive to the Final Office Action, dated December 16, 2002, please reconsider  
the application for the following reasons.

RECEIVED  
MAR 14 2003  
TECHNOLOGY CENTER 2800

IN THE CLAIMS

- See*
5. A method for manufacturing a semiconductor device comprising:  
forming an insulating layer having a contact hole therethrough on a semiconductor  
substrate;  
forming a diffusion barrier layer on a surface of the insulating layer and on surfaces  
within the contact hole; and  
forming a contact plug in the contact hole by forming a first sub-plug that fills a lower  
portion of the contact hole and forming a second sub-plug that fills an upper portion of the  
contact hole on the first sub-plug,  
wherein the first sub-plug fills a lower portion of the contact hole to a level  
substantially below a top surface of the insulating layer.



RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 2814

PATENT APPLICATION  
Do. No. 9898-189

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yoo-Sang HWANG and Su-Jin AHN

Serial No. 09/955,388

Examiner: Mai, Anh D

Confirmation No. 9987

Filed: September 17, 2001

Group Art Unit: 2814

For: SEMICONDUCTOR DEVICE HAVING CONTACT PLUG AND METHOD FOR  
MANUFACTURING THE SAME

BOX AF

Assistant Commissioner for Patents,  
Washington, D.C. 20231

Responsive to the Final Office Action dated December 16, 2002, enclosed is an amendment to the above-identified application.

The fee has been calculated as shown below.

CLAIMS AS AMENDED					
For:	Number After Amendment	Previous Number	Extra	Rate	Additional Fee
Total Claims	11	11	0	x \$18 =	\$0.00
Independent Claims	1	1	0	x \$84 =	\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00

\*greater of twenty (20) or number for which fee has been paid

\*\*greater of three (3) or number for which fee has been paid



Return Postcard



Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



20575

PATENT TRADEMARK OFFICE

Alan T. McCollom  
Reg. No. 28,881

MARGER JOHNSON & McCOLLOM, P.C.  
1030 SW Morrison Street  
Portland, OR 97205  
(503) 222-3613

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:  
☐ COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON D.C. 20231  
☒ ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON D.C. 20231  
☐ ASSISTANT COMMISSIONER FOR TRADEMARKS, 2900 CRYSTAL DRIVE, ARLINGTON, VA 22202-3513

ON

RECEIVED  
MAR 14 2003  
TECHNOLOGY CENTER 2800